

## ERIC REPORT RESUME

ERIC ACC. NO.

ED 030 782

CH ACC. NO.

AA 000 389

P.A.

PUBL. DATE

Jul 69

ISSUE

RIEDEC69

IS DOCUMENT COPYRIGHTED?

YES ☐ NO ☒

ERIC REPRODUCTION RELEASE?

YES ☐ NO ☒

LEVEL OF AVAILABILITY

I ☒ II ☐ III ☐

AUTHOR

TITLE

Science Education Information Report, General Bibliography Series 30, Teacher Characteristics, Student Characteristics.

SOURCE CODE

RUF24927

INSTITUTION (SOURCE)

ERIC Information Analysis Center for Science Education, Columbus, Ohio

SP. AG. CODE

SPONSORING AGENCY

EDRS PRICE

0.25;1.15

CONTRACT NO.

GRANT NO.

REPORT NO.

BUREAU NO.

AVAILABILITY

JOURNAL CITATION

DESCRIPTIVE NOTE

21p.

DESCRIPTORS

\*Bibliographies; \*Science Education; \*Mathematics Education; Science Teachers; Mathematics Teachers; Student Attitudes; \*Student Characteristics; Teacher Attitudes; \*Teacher Characteristics; Teacher Evaluation

IDENTIFIERS

ABSTRACT

Reported are 49 citations of documents related to teacher and student characteristics in science and mathematics education. The documents included represent research reviews, conference reports, research reports, position papers, textbooks, manuals, speeches, and other types. Citations are categorized in alphabetical order by author, and indicate source, availability, and major ideas of the document. The bibliography updates, but does not replace, bibliography 20 (ED 026 286) and bibliography 10 (ED 021 773). (RH)

ED 030 782

GENERAL BIBLIOGRAPHY SERIES  
BIBLIOGRAPHY 30

TEACHER CHARACTERISTICS  
STUDENT CHARACTERISTICS

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE  
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE  
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION  
POSITION OR POLICY.

AA 000 389

**SEIAC/SCIENCE EDUCATION INFORMATION ANALYSIS CENTER**

... an information center to organize and disseminate information and materials on science education to teachers, administrators, supervisors, researchers, and the public. A joint project of The Ohio State University and the Educational Resources Information Center of USOE.

**SCIENCE EDUCATION INFORMATION REPORT**

**GENERAL BIBLIOGRAPHY SERIES  
BIBLIOGRAPHY 30**

**TEACHER CHARACTERISTICS  
STUDENT CHARACTERISTICS**

**ERIC Information Analysis Center  
for Science Education  
1460 West Lane Avenue  
Columbus, Ohio 43210**

**July, 1969**

## BIBLIOGRAPHY 30

	Page
Table of Contents	
A. Teacher Characteristics	1
B. Student Characteristics	7
C. Author Index	14
D. Unauthored Articles	15

## SCIENCE EDUCATION INFORMATION REPORTS

The Science Education Information Reports are being developed to disseminate information concerning documents analyzed at the ERIC Information Analysis Center for Science Education. The Reports include five types of publications. General Bibliographies are being issued to announce most documents processed by the Information Analysis Center for Science Education. These bibliographies are categorized by topics and indicate the availability of the document and the major ideas included in the document. Special Bibliographies are being developed to announce availability of documents in selected interest areas. These bibliographies will list most significant documents that have been published in the interest area. Guides to Resource Literature for Science Teachers are bibliographies that identify references for the professional growth of teachers at all levels of science teaching. This series will include six separate publications. State-of-the-Art Papers will be issued periodically to indicate implications of research for science teaching. Research Reviews will be issued to analyze and synthesize research related to science education over a period of several years.

The Science Education Information Reports will be announced in the SEIAC Newsletter as they become available.

### GENERAL BIBLIOGRAPHIES

The General Bibliographies are being developed to announce the documents acquired and processed by the ERIC Information Analysis Center for Science Education. The bibliographies will focus on general topics. This bibliography announces most documents related to the topic that were included in the third 2,000 documents processed by this Center. It supplements General Bibliography 10 and 20. Additional supplements will be issued as documents are processed.

### USING BIBLIOGRAPHIC CITATIONS

All documents are listed by similar bibliographic citations. A sample citation is explained for your convenience. You will find it helpful to study the explanation of the sample citation before using this bibliography.

## SAMPLE OF BIBLIOGRAPHIC CITATION

---

- (1) SE 004 904                      (2) 3                      (3) 10 31 15  
(4) HELGESON, STANLEY L.  
(5) LESSON PLANS AND TESTS OF KNOWLEDGE, COMPREHENSION, AND APPLICATION FOR  
INSTRUCTION IN CONCEPTS OF FORCE, GRADES 2-6  
(6) UNIVERSITY OF WISCONSIN, MADISON, RESEARCH AND DEVELOPMENT CENTER  
(7) EDRS  
(8) ED 020 907              MF \$0.25              HC \$2.35  
(9) 03 00 68              (10) 45  
(11) \*ELEMENTARY SCHOOL SCIENCE, \*FORCES (PHYSICAL), \*INSTRUCTION, \*PHYSICS, \*TEACHING  
GUIDES, ACADEMIC ACHIEVEMENT, COGNITIVE PROCESSES, CONCEPT FORMATION, EVALUATION,  
LEARNING, PHYSICAL SCIENCES, TESTS, RESEARCH REPORTS
- 

## EXPLANATION OF BIBLIOGRAPHIC CITATION

- (1) SE 004 904

This is the Science Education Center's identification number for the document. It serves as the name for the document and provides a way of locating the material.

- (2) 3

This field indicates the level of processing of the document.

- 1--cataloged and indexed
- 2--cataloged, indexed, and annotated or abstracted
- 3--announced in Research in Education

- (3) 10 31 15

Field three is a code for developing bibliographies. By using this code several kinds of bibliographies can be structured by retrieval specialists or by computer programs.

- (4) HELGESON, STANLEY L.

The principal author, editor, or organization associated with the writing of the document is listed.

- (5) LESSON PLANS AND TESTS OF KNOWLEDGE, COMPREHENSION, AND APPLICATION FOR  
INSTRUCTION IN CONCEPTS OF FORCE, GRADES 2-6

Title of document.

(6) UNIVERSITY OF WISCONSIN, MADISON, RESEARCH AND DEVELOPMENT CENTER

This indicates where the document was obtained by the Center.

(7) EDRS

Field seven indicates the source of the document. If the document is available from the ERIC Document Reproduction Service (EDRS) it can be ordered.

(8) ED 020 907 MF \$0.25 HC \$2.35

If a document is announced in Research in Education, the ED number of the document is indicated in this space. If the document is available from EDRS the price of the document is also indicated in this field. MF indicates microfiche and HC indicates hardcopy. This document would cost \$0.25 in microfiche or \$2.35 in hardcopy.

(9) 03 00 68

This field designates the publication date of the document (March, 1968). The first set of two numerics represents the month; the second, the day of the month; and the third, the year. In most cases the date is obtained from the document. In a few cases, when no date of publication is on the document, the date is estimated based on the best information available in the document.

(10) 45

Field ten identifies the number of pages in the document. This document contains 45 pages. Use of this field will provide information concerning the length of the document.

(11) \*ELEMENTARY SCHOOL SCIENCE, \*FORCES (PHYSICAL), \*INSTRUCTION, \*PHYSICS, \*TEACHING GUIDES, ACADEMIC ACHIEVEMENT, COGNITIVE PROCESSES, CONCEPT FORMATION, EVALUATION, LEARNING, PHYSICAL SCIENCES, TESTS, RESEARCH REPORTS

This field provides an indication of the ideas included in the document. Each term, such as \*INSTRUCTION, has been selected by an information analyst because the term is important for the identification of the document. Terms marked with an asterisk represent primary ideas in the document; the other terms represent ideas of lesser importance. You can use this information to narrow the number of documents you want to review.



## A. TEACHER CHARACTERISTICS

1. SE 005 049 3 12 95 03  
SCIENCE EDUCATION INFORMATION REPORT, GENERAL BIBLIOGRAPHY SERIES 10, TEACHER CHARACTERISTICS, STUDENT CHARACTERISTICS  
ERIC INFORMATION ANALYSIS CENTER FOR SCIENCE EDUCATION, COLUMBUS, OHIO  
EDRS  
ED 021 773 MF \$0.25 HC \$0.95  
05 00 68  
\*BIBLIOGRAPHIES, \*SCIENCE TEACHERS, \*STUDENT CHARACTERISTICS, \*TEACHER CHARACTERISTICS, ADVANCED PROGRAMS, BIOLOGY, CHEMISTRY, COLLEGE SCIENCE, DOCTORAL THESES, ELEMENTARY SCHOOL SCIENCE, EDUCATIONALLY DISADVANTAGED, INTERACTION PROCESS ANALYSIS, PHYSICS, PHYSICAL SCIENCES, SLOW LEARNERS, SECONDARY SCHOOL SCIENCE, TEACHER EVALUATION, TEACHER ATTITUDES, STUDENT ATTITUDES
2. SE 005 757 3 12 92 17  
CARTER, JACK CALDWELL  
SELECTED CHARACTERISTICS OF BEGINNING SCIENCE AND MATHEMATICS TEACHERS IN GEORGIA  
UNIVERSITY OF GEORGIA  
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
ED 025 425 NOT AVAILABLE FROM EDRS  
67 150  
\*BEGINNING TEACHERS, \*MATHEMATICS TEACHERS, \*SCIENCE TEACHERS, \*TEACHER CHARACTERISTICS, PERSONALITY STUDIES, DOCTORAL THESES, RESEARCH REPORTS, BILLS INDEX OF ADJUSTMENT AND VALUES, TERP ATTITUDE SCALE, RYAN'S TEACHER CHARACTERISTICS SCHEDULE, GEORGIA
3. SE 005 110 2 12 01 17  
CARUTHERS, BERTRAM, SR.  
TEACHER PREPARATION AND EXPERIENCE RELATED TO ACHIEVEMENT OF FIFTH GRADE PUPILS IN SCIENCE  
UNIVERSITY OF NEBRASKA TEACHERS COLLEGE  
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
67 85  
\*ACHIEVEMENT, \*ELEMENTARY SCHOOL SCIENCE, \*ELEMENTARY SCHOOL TEACHERS, \*TEACHER CHARACTERISTICS, ACADEMIC ACHIEVEMENT, DOCTORAL THESES, GRADE 5, INSTRUCTION, RESEARCH REPORTS, TEACHER EXPERIENCE, TEACHER BEHAVIOR, TEACHER BACKGROUND
4. SE 004 396 1 12 86 20  
HANDLEY, HERBERT M; BLEDSOE, JOSEPH C.  
THE PERSONALITY PROFILES OF INFLUENTIAL SCIENCE TEACHERS, REGULAR SCIENCE TEACHERS, AND SCIENCE RESEARCH STUDENTS  
JOURNAL OF RESEARCH IN SCIENCE TEACHING  
68 9  
\*PERSONALITY STUDIES, \*SCIENCE TEACHERS, \*TEACHER CHARACTERISTICS, \*TEACHER ROLE, RESEARCH REPORTS



5. SE 004 377 1 12 86 17  
HEDLEY, CAROLYN NEAL  
THE RELATIONSHIP OF PERSONALITY FACTORS TO SCIENTIFIC AND MATHEMATICAL  
ABILITY FACTORS  
SCHOOL SCIENCE AND MATHEMATICS  
04 00 68 7  
\*ABILITY, \*SCIENTIFIC APTITUDE, \*TEACHER CHARACTERISTICS, MATHEMATICS,  
PREDICTION, RESEARCH REPORTS, SCIENCES, SCIENTISTS, KUDER PREFERENCE  
RECORD, SCIENCE COLLEGE ABILITY TEST, MINNESOTA MULTIPHASE PERSONALITY  
INVENTORY, 1961, UNIVERSITY OF ILLINOIS
6. SE 005 849 1 12 02 22  
HELDMAN, LAWRENCE; AND OTHERS  
AN INVENTORY OF THE NEEDS OF TEACHERS OF SCIENCE IN THE CATSKILL  
AREA SCHOOLS, PART II, GRADES 7-12  
CATSKILL AREA SCHOOL STUDY COUNCIL, ONEONTA, NEW YORK  
04 00 68 16  
\*PROJECT REPORTS, \*SECONDARY SCHOOL SCIENCE, \*SCHOOL SURVEYS, \*SCIENCE  
TEACHERS, \*SCIENCE PROGRAMS, SCIENCE FACILITIES, TEACHER CHARACTERISTICS,  
CATSKILL AREA SCHOOL STUDY COUNCIL, PROJECT PROBE, UNITED STATES OFFICE  
OF EDUCATION
7. SE 005 131 3 12 81 17  
HINES, SALLYLEE HUGHES  
A STUDY OF CERTAIN FACTORS WHICH AFFECT THE OPINIONS OF ELEMENTARY  
SCHOOL TEACHERS IN THE TEACHING OF SCIENCE  
OKLAHOMA STATE UNIVERSITY  
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
ED 024 583 NOT AVAILABLE FROM EDRS  
66 332  
\*ELEMENTARY SCHOOL SCIENCE, \*ELEMENTARY SCHOOL TEACHERS, \*TEACHER  
ATTITUDES, DOCTORAL THESES, RESEARCH REPORTS, TEACHER CHARACTERISTICS,  
TEACHER BACKGROUND, 1966
8. SE 005 135 3 12 93 17  
JORGENSEN, HAROLD CHRISTEN  
CHARACTERISTICS OF TEACHER SUBMITTING APPLICATIONS FOR ACADEMIC  
YEAR INSTITUTE PROGRAMS AT OREGON STATE UNIVERSITY  
OREGON STATE UNIVERSITY  
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
ED 024 584 NOT AVAILABLE FROM EDRS  
66 155  
\*SCIENCE INSTITUTES, \*TEACHER CHARACTERISTICS, DOCTORAL THESES,  
EDUCATIONAL BACKGROUND, SCIENCE TEACHERS, TEACHER EDUCATION,  
ACADEMIC YEAR INSTITUTE, OREGON STATE UNIVERSITY

9. SE 005 462 1 12 86 17  
 KIMBALL, MERRITT E.  
 UNDERSTANDING THE NATURE OF SCIENCE: A COMPARISON OF SCIENTISTS  
 AND SCIENCE TEACHERS  
 JOURNAL OF RESEARCH IN SCIENCE TEACHING  
 68 11  
 \*SCIENTIFIC ENTERPRISE, \*SCIENTISTS, \*SCIENCE TEACHERS, \*SCIENTIFIC  
 CONCEPTS, COMPARATIVE ANALYSIS, RESEARCH REPORTS, TEACHER EDUCATION,  
 FORD FOUNDATION, NATURE OF SCIENCE SCALE
10. SE 005 138 3 12 81 17  
 LANE, RODNEY A.  
 DETERMINATION OF THE COMPETENCE IN THE AAAS ELEMENTARY SCIENCE  
 CURRICULUM OF ELEMENTARY SCHOOL TEACHERS IN TWO FLORIDA COUNTIES  
 FLORIDA STATE UNIVERSITY  
 UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
 ED 023 592 NOT AVAILABLE FROM EDRS  
 66 159  
 \*ELEMENTARY SCHOOL SCIENCE, \*ELEMENTARY SCHOOL TEACHERS, \*TEACHER  
 CHARACTERISTICS, \*TEACHER BACKGROUND, \*TEACHER BEHAVIOR, DOCTORAL  
 THESES, SCIENCE EDUCATION, FLORIDA, SCIENCE - A PROCESS APPROACH,  
 AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, ELEMENTARY  
 TEACHERS SCIENCE INVENTORY, 1966
11. SE 005 597 1 12 32 02  
 MACHLUP, STEFAN  
 RECRUITING HIGH SCHOOL TEACHERS - A PROPOSAL  
 THE PHYSICS TEACHER  
 09 00 68 3  
 \*PHYSICS TEACHERS, \*SECONDARY SCHOOL SCIENCE, \*TEACHER RECRUITMENT,  
 \*TEACHER EDUCATION, PHYSICS, SALARIES, TEACHER CHARACTERISTICS, 1968
12. SE 005 646 1 12 12 17  
 PARAKH, JAL S.  
 A STUDY OF TEACHER-PUPIL INTERACTION IN HIGH SCHOOL BIOLOGY  
 CLASSES. PART II, DESCRIPTION AND ANALYSIS  
 JOURNAL OF RESEARCH IN SCIENCE TEACHING  
 68 10  
 \*BIOLOGY, \*INTERACTION PROCESS ANALYSIS, \*INSTRUCTION, \*SECONDARY  
 SCHOOL SCIENCE, LEARNING, RESEARCH REPORTS, STUDENT CHARACTERISTICS,  
 STUDENT BEHAVIOR, TEACHER BEHAVIOR, TEACHER CHARACTERISTICS,  
 FLANDERS INTERACTION ANALYSIS SYSTEM, 1967

13. SE 004 189 2 12 12 17  
 PARAKH, JAL S.  
 A STUDY OF RELATIONSHIPS AMONG TEACHER BEHAVIOR, PUPIL BEHAVIOR,  
 AND PUPIL CHARACTERISTICS IN HIGH SCHOOL BIOLOGY CLASSES, FINAL REPORT  
 U.S. DEPARTMENT OF HEW, OFFICE OF EDUCATION  
 09 00 67 130  
 \*BIOLOGY, \*EDUCATIONAL RESEARCH, \*INTERACTION PROCESS ANALYSIS,  
 \*SECONDARY SCHOOL SCIENCE, \*TEACHER EDUCATION, \*TEACHER BEHAVIOR,  
 \*STUDENT CHARACTERISTICS, ACADEMIC ACHIEVEMENT, RESEARCH REPORTS, 1966
14. SE 005 158 3 12 75 17  
 PERKES, VICTOR ASTON  
 JUNIOR HIGH SCHOOL TEACHER PREPARATION, TEACHING BEHAVIORS,  
 AND STUDENT ACHIEVEMENT  
 STANFORD UNIVERSITY, CALIFORNIA  
 UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
 ED 025 417 NOT AVAILABLE FROM EDRS  
 67 428  
 \*ACHIEVEMENT, \*INSTRUCTION, \*SECONDARY SCHOOL SCIENCE, \*TEACHER  
 CHARACTERISTICS, \*TEACHER BACKGROUND, DOCTORAL THESES, EFFECTIVE  
 TEACHING, TEACHING PROCEDURES, SCIENCE TEACHING OBSERVATION  
 INSTRUMENT, CALIFORNIA TEST OF MENTAL MATURITY
15. SE 003 745 3 12 09 17  
 ROSENBLOOM, PAUL C.; AND OTHERS  
 CHARACTERISTICS OF MATHEMATICS TEACHERS THAT AFFECT STUDENTS'  
 LEARNING. FINAL REPORT  
 MINNESOTA SCHOOL MATHEMATICS AND SCIENCE CENTER, UNIVERSITY  
 OF MINNESOTA, MINNEAPOLIS  
 EDRS  
 ED 021 707 MF \$0.75 HC \$8.45  
 08 00 66 167  
 \*INSTRUCTION, \*LEARNING, \*MATHEMATICS, \*TEACHER CHARACTERISTICS,  
 \*SECONDARY SCHOOL MATHEMATICS, ACHIEVEMENT, CURRICULUM, TEACHER  
 EDUCATION
16. SE 004 382 1 12 32 17  
 SADLER, PAUL M.  
 TEACHER PERSONALITY CHARACTERISTICS AND ATTITUDES CONCERNING  
 PSSC PHYSICS  
 JOURNAL OF RESEARCH IN SCIENCE TEACHING  
 68 2  
 \*ATTITUDES, \*PHYSICS, \*SECONDARY SCHOOL SCIENCE, \*TEACHER  
 CHARACTERISTICS, \*TEACHER ATTITUDES, PERSONALITY, RESEARCH  
 REPORTS, NATIONAL SCIENCE FOUNDATION, PHYSICAL SCIENCE STUDY  
 COMMITTEE, BIOLOGICAL SCIENCES CURRICULUM STUDY, CALIFORNIA  
 PSYCHOLOGICAL INVENTORY, VALPARAISO UNIVERSITY

17. SE 004 043 3 12 42 17  
 SARGENT, EARL ALVIN  
 A STUDY TO DETERMINE CERTAIN CHARACTERISTICS OF EARTH SCIENCE CURRICULUM  
 PROJECT TEACHERS AND STUDENTS IN THE PERMISSIVE OR AUTHORITARIAN  
 CLASSROOMS WHICH LEAD TO GREATER ACADEMIC ACHIEVEMENT IN THESE STUDENTS  
 COLORADO STATE COLLEGE, GREELEY  
 UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
 ED 021 716 NOT AVAILABLE FROM EDRS  
 66 136  
 \*ACHIEVEMENT, \*EARTH SCIENCE, \*SECONDARY SCHOOL SCIENCE, \*TEACHING  
 METHODS, \*TEACHER CHARACTERISTICS, COMPARATIVE ANALYSIS, DOCTORAL  
 THESES, NON-AUTHORITARIAN CLASSES, SCIENCE TEACHERS, RESEARCH REPORTS,  
 ELEMENTARY SCIENCE, CURRICULUM PROJECT
18. SE 004 388 1 12 32 17  
 SCHMEDEMAN, GARY; LA SHIER, WILLIAM S.  
 COGNITIVE PREFERENCES OF STUDENTS AND SELECTED CHARACTERISTICS  
 OF THEIR PSSC TEACHERS  
 JOURNAL OF RESEARCH IN SCIENCE TEACHING  
 68 3  
 \*COGNITIVE PROCESSES, \*PHYSICS, \*SECONDARY SCHOOL SCIENCE,  
 \*TEACHER CHARACTERISTICS, RESEARCH REPORTS, COGNITIVE PREFERENCE TEST,  
 PHYSICAL SCIENCE STUDY COMMITTEE, 1966
19. SE 004 538 1 12 33 22  
 SHUGART, C. G.  
 A COURSE AND TEACHER EVALUATION  
 THE PHYSICS TEACHER  
 04 00 68 4  
 \*COLLEGE SCIENCE, \*EVALUATION, \*PHYSICS, \*TEACHER EVALUATION,  
 \*TEACHER CHARACTERISTICS, PHYSICAL SCIENCES
20. SE 005 924 1 12 92 17  
 TWEETEN, PAUL W.; YAGER, ROBERT E.  
 CONTENT PREPARATION OF SCIENCE TEACHERS IN IOWA  
 SCHOOL SCIENCE AND MATHEMATICS  
 12 00 68 4  
 \*ACADEMIC EDUCATION, \*SCIENCE TEACHERS, \*SECONDARY SCHOOL SCIENCE,  
 \*TEACHER CHARACTERISTICS, \*TEACHER EDUCATION, BIOLOGY, CHEMISTRY,  
 PHYSICS, STATE SURVEYS, IOWA, 1968
21. SE 002 976 2 12 32 17  
 WALBERG, HERBERT J.; WELCH, WAYNE W.  
 PERSONALITY CHARACTERISTICS OF INNOVATIVE PHYSICS TEACHERS  
 JOURNAL OF CREATIVE BEHAVIOR  
 67 10  
 \*CREATIVE TEACHING, \*MALES, \*PERSONALITY ASSESSMENT, \*PHYSICS  
 TEACHERS, \*SECONDARY SCHOOL SCIENCE, \*TEACHER CHARACTERISTICS,  
 \*TEACHER ATTITUDES, ACADEMIC ACHIEVEMENT, PHYSICS, RESEARCH  
 REPORTS, ALLPORT-VERNON-LINDZEY STUDY OF VALUES, EDWARDS  
 PERSONAL PREFERENCE SCHEDULE, MINNESOTA TEACHER ATTITUDE  
 INVENTORY, TEST OF SELECTED TOPICS IN PHYSICS

22. SE 005 491 1 12 21 17  
WOODARD, A. L.  
STAR TEACHER RESEARCH PROJECT  
UNIVERSITY OF GEORGIA, ATHENS, COLLEGE OF EDUCATION  
08 00 66 11  
\*MASTER TEACHERS, \*SECONDARY SCHOOL SCIENCE, \*SECONDARY SCHOOL  
TEACHERS, \*TEACHER CHARACTERISTICS, HIGH SCHOOL STUDENTS, RESEARCH  
REPORTS, GEORGIA, UNIVERSITY OF GEORGIA, NATIONAL ASSOCIATION OF  
RESEARCH IN SCIENCE TEACHING, STUDENT TEACHER ACHIEVEMENT  
RECOGNITION, 1967



## B. STUDENT CHARACTERISTICS

1. SE 004 924 1 13 86 20  
EDITORIAL COMMENT  
BIOLOGY AND HUMAN AFFAIRS  
67 9  
\*ABILITY IDENTIFICATION, \*INDIVIDUAL CHARACTERISTICS, \*SCIENTISTS,  
COLLEGE SCIENCE, PSYCHOLOGICAL CHARACTERISTICS, SOCIAL CHARACTERISTICS,  
TALENT IDENTIFICATION
2. SE 004 021 2 13 12 17  
BINGMAN, RICHARD MARVIN  
APTITUDE AND INTEREST PROFILES OF TENTH GRADE BIOLOGY STUDENTS  
PARTICIPATING IN THE MONTGOMERY COUNTY, PENNSYLVANIA SCIENCE FAIRS  
TEMPLE UNIVERSITY, PHILADELPHIA, PENNSYLVANIA  
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
67 161  
\*ATTITUDES, \*BIOLOGY, \*INTERESTS, \*SECONDARY SCHOOL SCIENCE,  
\*SCIENCE FAIRS, DOCTORAL THESES, GRADE 10, RESEARCH REPORTS,  
MONTGOMERY COUNTY, PENNSYLVANIA, 1967
3. SE 005 655 1 13 12 17  
BINGMAN, RICHARD MARVIN  
APTITUDE AND INTEREST PROFILES OF BIOLOGY PARTICIPANTS IN  
MONTGOMERY COUNTY, PENNSYLVANIA SCIENCE FAIRS  
JOURNAL OF RESEARCH IN SCIENCE TEACHING  
68 8  
\*BIOLOGY, \*GRADE 10, \*STUDENT CHARACTERISTICS, \*SECONDARY SCHOOL  
SCIENCE, \*SCIENCE FAIRS, APTITUDE INTERESTS, RESEARCH REPORTS,  
SCIENCE SERVICE INCORPORATED, INTERNATIONAL SCIENCE FAIR,  
DIFFERENTIAL APTITUDE TESTS, KUDER PREFERENCE RECORD-VOCATIONAL FORM
4. SE 005 971 3 13 01 17  
BOZARTH, JAMES OLIVER  
THE ABILITY TO CONSERVE QUANTITY OF LIQUID AND ITS RELATIONSHIP  
TO SOCIOECONOMIC BACKGROUND, INTELLIGENCE, AND ACHIEVEMENT  
AMONG SELECTED FOURTH GRADE PUPILS  
UNIVERSITY OF ARIZONA, TUCSON  
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
ED 026 266 NOT AVAILABLE FROM EDRS  
68 112  
\*ACHIEVEMENT, \*CONCEPT FORMATION, \*ELEMENTARY SCHOOL SCIENCE,  
\*LEARNING, \*SOCIOECONOMIC BACKGROUND, DOCTORAL THESES, GRADE 4,  
INTELLIGENCE, SOCIOECONOMIC INFLUENCE, STUDENT CHARACTERISTICS,  
METROPOLITAN ACHIEVEMENT TEST, LORGE-THORNDIKE INTELLIGENCE TEST,  
STANFORD ACHIEVEMENT TEST, PIAGET CONSERVATION TESTS

5. SE 004 549 1 13 09 17  
 BRODIE, DONALD Q.; SUCHMAN, EDWARD A.  
 SOCIOECONOMIC STATUS AND STUDENTS' EDUCATIONAL DESIRES  
 UNIVERSITY OF PITTSBURGH, PENNSYLVANIA, LEARNING RESEARCH  
 AND DEVELOPMENT CENTER  
 08 00 67 12  
 \*ACADEMIC ASPIRATION, \*EDUCATIONAL DESIRES, \*HIGH ACHIEVERS,  
 \*LOW ABILITY STUDENTS, \*SOCIOECONOMIC STATUS, \*STUDENT ATTITUDES,  
 EDUCATIONAL ATTITUDES, SOCIOECONOMIC BACKGROUND, STUDENT INTERESTS
6. SE 004 059 3 13 22 17  
 BROWN, TERRANCE RALPH  
 ATTITUDES TOWARD SCIENCE AND CRITICAL THINKING ABILITIES OF  
 CHEMISTRY AND NON-CHEMISTRY STUDENTS IN THE TACOMA PUBLIC SCHOOLS  
 OREGON STATE UNIVERSITY, CORVALLIS  
 UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
 ED 022 671 NOT AVAILABLE FROM EDRS  
 67 145  
 \*ACHIEVEMENT, \*CHEMISTRY, \*CRITICAL THINKING, \*STUDENT ATTITUDES,  
 \*SECONDARY SCHOOL SCIENCE, COMPARATIVE ANALYSIS, DOCTORAL THESES,  
 STUDENT CHARACTERISTICS, RESEARCH REPORTS, TACOMA, WASHINGTON,  
 CORNELL CRITICAL THINKING TEST, REACTION INVENTORY, DIFFERENTIAL  
 APTITUDE TEST
7. SE 004 312 2 13 82 17  
 DELANEY, CREIGHTON HALL  
 A STUDY OF THE ATTITUDES OF EIGHTH GRADE STUDENTS TOWARD  
 SPECIFIC ART ACTIVITIES IN RELATIONSHIP TO THEIR ATTITUDES  
 TOWARD CREATIVE ACTIVITIES IN ENGLISH AND SCIENCE AND  
 THEIR DRAWING ABILITIES  
 ARIZONA STATE UNIVERSITY, TEMPE  
 UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
 65 129  
 \*ATTITUDES, \*ART, \*CREATIVITY, \*SECONDARY SCHOOL SCIENCE,  
 \*STUDENT CHARACTERISTICS, DOCTORAL THESES, GRADE 8, RESEARCH REPORTS,  
 SCIENCE ACTIVITIES
8. SE 004 851 3 13 93 17  
 GOHN, LYLE ALAN  
 AN INVESTIGATION OF THE SELECTION TECHNIQUES OF VETERINARY  
 SCIENCE AND MEDICINE STUDENTS AT PURDUE UNIVERSITY  
 PURDUE UNIVERSITY, LAFAYETTE, INDIANA  
 UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
 ED 022 681 NOT AVAILABLE FROM EDRS  
 67 169  
 \*ACHIEVEMENT, \*COLLEGE STUDENTS, \*COLLEGE SCIENCE, \*MEDICAL  
 STUDENTS, \*VETERINARY MEDICINE, DOCTORAL THESES, GRADES  
 (SCHOLASTIC), RESEARCH REPORTS, PURDUE UNIVERSITY, SCHOOL  
 OF VETERINARY MEDICINE AND SCIENCE



9. SE 005 764 1 13 88 17  
GREEN, FREDERICK ELMAN  
ELEMENTARY SCHOOL CHILDREN'S INTERESTS IN THE SOCIAL SCIENCES  
AS REVEALED BY A FORCED CHOICE QUESTIONNAIRE  
BALL STATE UNIVERSITY  
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
68 100  
\*ELEMENTARY EDUCATION, \*RESEARCH REPORTS, \*SOCIAL SCIENCES,  
\*STUDENT INTERESTS, \*STUDENT CHARACTERISTICS, ANTHROPOLOGY,  
DOCTORAL THESES, ECONOMICS, GEOGRAPHY, HISTORY, SOCIOLOGY, 1968
10. SE 005 129 2 13 92 17  
HEDLEY, ROBERT LLOYD  
STUDENT ATTITUDE AND ACHIEVEMENT IN SCIENCE COURSES  
IN MANITOBA SECONDARY SCHOOLS  
MICHIGAN STATE UNIVERSITY  
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
66 195  
\*ACHIEVEMENT, \*CHEMISTRY, \*PHYSICS, \*STUDENT CHARACTERISTICS,  
\*SECONDARY SCHOOL SCIENCE, ATTITUDES, COMPARATIVE ANALYSIS, DOCTORAL  
THESES, GRADE 10, GENERAL SCIENCE, PHYSICAL SCIENCE, RESEARCH  
REPORTS, SCIENCE COURSE IMPROVEMENT PROJECT, SCIENTIFIC ATTITUDES,  
1966, PHYSICAL SCIENCE STUDY COMMITTEE, CHEMICAL EDUCATION  
MATERIALS STUDY, OTIS MENTAL ABILITY TEST, TEST ON UNDERSTANDING  
SCIENCE, STUDENT ATTITUDE TOWARD SCIENCE
11. SE 005 654 1 13 13 17  
JOHNSTEN, THOMAS D.  
ACHIEVEMENT IN GENERAL COLLEGE BIOLOGY AS RELATED TO HIGH  
SCHOOL BACKGROUND IN SCIENCE AND MATHEMATICS  
JOURNAL OF RESEARCH IN SCIENCE TEACHING  
68 2  
\*ACADEMIC ACHIEVEMENT, \*BIOLOGY, \*COLLEGE SCIENCE, EDUCATIONAL  
BACKGROUND, MATHEMATICS, PREDICTION, RESEARCH REPORTS, STUDENT  
CHARACTERISTICS, SCIENCES, UNIVERSITY OF NEBRASKA DEPARTMENT  
OF CERTIFICATION, ADVANCED BIOLOGY PLACEMENT EXAMINATION
12. SE 000 023 2 13 95 17  
MALLINSON, GEORGE G.  
AN ANALYSIS OF THE FACTORS RELATED TO THE MOTIVATION AND  
ACHIEVEMENT OF STUDENTS IN SCIENCE COURSES IN THE JUNIOR  
AND SENIOR HIGH SCHOOLS. FINAL REPORT  
WESTERN MICHIGAN UNIVERSITY, KALAMAZOO  
177  
\*ACHIEVEMENT, \*MOTIVATION, \*SCIENCE CAREERS, \*SECONDARY SCHOOL  
SCIENCE, \*STUDENT CHARACTERISTICS, \*RESEARCH REPORTS, ABLE STUDENTS,  
SCIENTIFIC MANPOWER, SECONDARY SCHOOL STUDENTS, UNITED STATES  
OFFICE OF EDUCATION, SCIENCE RESEARCH ASSOCIATE JUNIOR INVENTORY,  
SCIENCE RESEARCH ASSOCIATE PRIMARY MENTAL ABILITIES, YOUR  
EDUCATIONAL PLANS, DIAGNOSTIC READING TEST, SCIENCE RESEARCH  
ASSOCIATE ACHIEVEMENT SERIES, NELSON BIOLOGY TEST, KUDER  
PREFERENCE RECORD, TEST FOR GENERAL PHYSICAL SCIENCE, AMERICAN  
CHEMICAL SOCIETY-NATIONAL SCIENCE TEACHERS ASSOCIATION CHEMISTRY  
TEST, DUNNING PHYSICS TEST, SCIENCE RESEARCH ASSOCIATE TESTS  
OF EDUCATIONAL ABILITY

13. SE 005 766 3 13 23 17  
 MYERS, BYRON EVANS  
 AN APPRAISAL OF CHANGE OF ATTITUDES TOWARD SCIENCE AND  
 AND SCIENTISTS AND OF STUDENT ACHIEVEMENT IN AN INTRODUCTORY  
 COLLEGE CHEMISTRY COURSE RELATIVE TO THE STUDENTS'  
 BACKGROUNDS IN HIGH-SCHOOL CHEMISTRY AND PHYSICS  
 PENNSYLVANIA STATE UNIVERSITY.  
 UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
 ED 024 609 NOT AVAILABLE FROM EDRS  
 67 258  
 \*ATTITUDES, \*CHEMISTRY, \*COLLEGE SCIENCE, \*STUDENT CHARACTERISTICS,  
 \*STUDENT ATTITUDES, ACADEMIC ACHIEVEMENT, BEHAVIOR, DOCTORAL  
 THESES, SCIENTISTS, SCIENCES, PENNSYLVANIA STATE UNIVERSITY, 1966
14. SE 004 866 3 13 09 17  
 NEUFELD, K. ALLEN  
 DIFFERENCES IN PERSONALITY CHARACTERISTICS BETWEEN GROUPS HAVING  
 HIGH AND LOW MATHEMATICAL ACHIEVEMENT GAIN UNDER INDIVIDUALIZED  
 INSTRUCTION  
 UNIVERSITY OF WISCONSIN  
 UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
 ED 024 567 NOT AVAILABLE FROM EDRS  
 67 193  
 \*ACHIEVEMENT, \*ELEMENTARY SCHOOL MATHEMATICS, \*MATHEMATICS,  
 \*PERSONALITY, \*STUDENT CHARACTERISTICS, ACADEMIC ACHIEVEMENT,  
 COMPARATIVE ANALYSIS, GRADE 4, GRADE 5, GRADE 6, HIGH ACHIEVERS,  
 LOW ACHIEVERS
15. SE 005 511 1 13 09 17  
 O'HARA, SISTER VIRGINIA MARY  
 AN INVESTIGATION OF THE EXISTENCE OF A COMMON PERSONALITY  
 PATTERN AMONG UNDERACHIEVERS IN MATHEMATICS  
 DAYTON UNIVERSITY, OHIO, SCHOOL OF EDUCATION  
 07 00 67 3  
 \*ACHIEVEMENT, \*ATTITUDES, \*LOW ACHIEVERS, \*MATHEMATICS, \*SECONDARY  
 SCHOOL MATHEMATICS, ACADEMIC PERFORMANCE, COMPARATIVE ANALYSIS,  
 GRADE 8, RESEARCH REPORTS
16. SE 005 646 1 12 12 17  
 PARAKH, JAL S.  
 A STUDY OF TEACHER-PUPIL INTERACTION IN HIGH SCHOOL BIOLOGY  
 CLASSES. PART II, DESCRIPTION AND ANALYSIS  
 JOURNAL OF RESEARCH IN SCIENCE TEACHING  
 68 10  
 \*BIOLOGY, \*INTERACTION PROCESS ANALYSIS, \*INSTRUCTION, \*SECONDARY  
 SCHOOL SCIENCE, LEARNING, RESEARCH REPORTS, STUDENT CHARACTERISTICS, STUDENT  
 BEHAVIOR, TEACHER BEHAVIOR, TEACHER CHARACTERISTICS, FLANDERS  
 INTERACTION ANALYSIS SYSTEM, 1967

17. SE 004 189 2 13 12 17  
 PARAKH, JAL S.  
 A STUDY OF RELATIONSHIPS AMONG TEACHER BEHAVIOR, PUPIL  
 BEHAVIOR, AND PUPIL CHARACTERISTICS IN HIGH SCHOOL  
 BIOLOGY CLASSES. FINAL REPORT  
 U.S. DEPARTMENT OF HEW, OFFICE OF EDUCATION  
 09 00 67 130  
 \*BIOLOGY, \*EDUCATIONAL RESEARCH, \*INTERACTION PROCESS ANALYSIS,  
 \*SECONDARY SCHOOL SCIENCE, \*TEACHER EDUCATION, \*TEACHER BEHAVIOR,  
 \*STUDENT CHARACTERISTICS, ACADEMIC ACHIEVEMENT, RESEARCH REPORTS,  
 1966
18. SE 004 040 3 13 01 17  
 RAUN, CHESTER E.  
 THE INTERACTION BETWEEN CURRICULUM VARIABLES AND SELECTED  
 CLASSROOM STUDENT CHARACTERISTICS  
 UNIVERSITY OF TEXAS, AUSTIN  
 UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
 ED 022 668 NOT AVAILABLE FROM EDRS  
 67 119  
 \*CURRICULUM, \*ELEMENTARY SCHOOL SCIENCE, \*INQUIRY TRAINING,  
 \*PROBLEM SOLVING, \*STUDENT CHARACTERISTICS, ACHIEVEMENT, BEHAVIOR,  
 COGNITIVE PROCESSES, DOCTORAL THESES, GRADE 4, GRADE 5, GRADE 6,  
 PREDICTION, RESEARCH REPORTS, SCIENCE COURSE IMPROVEMENT PROJECT,  
 STUDENT BEHAVIOR, SEX DIFFERENCES, STUDENT ATTITUDES, SCIENCE-A  
 PROCESS APPROACH, 1967
19. SE 005 650 1 13 81 17  
 RAVEN, RONALD J.  
 THE DEVELOPMENT OF CLASSIFICATION ABILITIES IN CULTURALLY  
 DISADVANTAGED CHILDREN  
 JOURNAL OF RESEARCH IN SCIENCE TEACHING  
 68 7  
 \*COGNITIVE ABILITY, \*CULTURALLY DISADVANTAGED, \*ELEMENTARY  
 SCHOOL SCIENCE, \*LEARNING, \*STUDENT CHARACTERISTICS, ELEMENTARY  
 SCHOOL STUDENTS, RESEARCH REPORTS, URBAN SCHOOLS, 1967
20. SE 005 987 3 13 53 17  
 SAUNDERS, WALTER LANE  
 VERBAL-NUMERICAL ACHIEVEMENT IN A REQUIRED COLLEGE PHYSICAL SCIENCE  
 COURSE AND SOME PERSONALITY CORRELATES  
 OREGON STATE UNIVERSITY, CORVALLIS  
 UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
 ED 026 267 NOT AVAILABLE FROM EDRS  
 68 96  
 \*ACADEMIC ACHIEVEMENT, \*COLLEGE SCIENCE, \*PHYSICAL SCIENCES,  
 \*PERSONALITY STUDIES, \*STUDENT CHARACTERISTICS, ACHIEVEMENT,  
 ACADEMIC PERFORMANCE, MATHEMATICS, UNDERGRADUATE STUDY,  
 CALIFORNIA PSYCHOLOGICAL INVENTORY

21. SE 005 988 1 13 82 17  
 SHEDD, AARON NEAL  
 AN ANALYSIS OF SELECTED ACADEMIC AND SOCIOECONOMIC FACTORS AS THEY  
 RELATE TO TWO TYPES OF PARTICIPATION OF SECONDARY-SCHOOL STUDENTS  
 IN THE JUNIOR SCIENCE AND HUMANITIES SYMPOSIA, 1964-1965  
 THE AMERICAN UNIVERSITY  
 UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
 68 148  
 \*HUMANITIES, \*NATURAL SCIENCES, \*STUDENT PARTICIPATION, \*SECONDARY  
 SCHOOL SCIENCE, \*SYMPOSIA, \*STUDENT CHARACTERISTICS, DOCTORAL  
 THESES, EDUCATIONAL PROGRAMS, SOCIOECONOMIC INFLUENCES, 1964,  
 JUNIOR SCIENCE AND HUMANITIES SYMPOSIA
22. SE 004 309 2 13 91 18  
 STENDLER, CELIA BURNS  
 READINGS IN CHILD BEHAVIOR AND DEVELOPMENT  
 UNIVERSITY OF ILLINOIS, URBANA  
 64 498  
 \*BEHAVIOR DEVELOPMENT, \*CHILD DEVELOPMENT, \*CHILD PSYCHOLOGY,  
 \*DEVELOPMENT PSYCHOLOGY, \*LEARNING, PERSONALITY DEVELOPMENT,  
 BEHAVIOR, CONCEPT FORMATION, INFANTS, INDIVIDUAL CHARACTERISTICS,  
 LOGICAL THINKING, PARENT STUDENT RELATIONSHIP, SCIENTIFIC CONCEPTS
23. SE 004 386 1 08 81 17  
 THOMAS, PATRICIA GRAFTON; BUELL, ROBERT R.  
 PIAGETIAN STUDIES IN SCIENCE - PERCEPTION AND RENDERING  
 OF FORM BY CHILDREN  
 JOURNAL OF RESEARCH IN SCIENCE TEACHING  
 68 1  
 \*CONCEPT FORMATION, \*ELEMENTARY SCHOOL SCIENCE, \*LEARNING,  
 \*PERCEPTIONS, \*STUDENT CHARACTERISTICS, COGNITIVE PROCESSES,  
 GRADE 4, GRADE 5, GRADE 6, GRADE 7, RESEARCH REPORTS, PIAGET
24. SE 004 849 3 13 53 17  
 VAN ERDEWYK, ZENO MARTIN  
 ACADEMIC AND NON-ACADEMIC VARIABLES RELATED TO PERSISTENCE,  
 TRANSFER, AND ATTRITION OF ENGINEERING STUDENTS  
 NORTH DAKOTA UNIVERSITY, GRAND FORKS  
 UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
 ED 022 680 NOT AVAILABLE FROM EDRS  
 67 195  
 \*COLLEGE SCIENCE, \*ENGINEERING EDUCATION, \*PREDICTION, CAREERS,  
 DROPOUTS, DOCTORAL THESES, GRADES (SCHOLASTIC), TRANSFER STUDENTS,  
 UNDERGRADUATE STUDY, RESEARCH REPORTS, AMERICAN COLLEGE TESTS, UNIVERSITY  
 OF NORTH DAKOTA



25. SE 004 073 2 13 82 17  
 VITROGEN, DAVID  
 A METHOD FOR DETERMINING A GENERALIZED ATTITUDE OF HIGH SCHOOL  
 STUDENTS TOWARD SCIENCE  
 NEW YORK UNIVERSITY  
 UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
 65 258  
 \*EVALUATION, \*SECONDARY SCHOOL SCIENCE, \*STUDENT ATTITUDES, ATTITUDES,  
 ATTITUDE SCALES, DOCTORAL THESES, RESEARCH REPORTS, STUDENT  
 CHARACTERISTICS, STUDENT SCIENCE INTERESTS, IOWA TESTS OF EDUCATIONAL  
 DEVELOPMENT, KUDER PREFERENCE FORM-VOCATIONAL, SCIENCE TEACHER'S  
 RATING SCALE, 1965
26. SE 005 049 3 13 95 03  
 SCIENCE EDUCATION INFORMATION REPORT, GENERAL BIBLIOGRAPHY SERIES 10,  
 TEACHER CHARACTERISTICS, STUDENT CHARACTERISTICS  
 ERIC INFORMATION ANALYSIS CENTER FOR SCIENCE EDUCATION, COLUMBUS, OHIO  
 EDRS  
 ED 021 773 MF \$0.25 HC \$0.95  
 05 00 68 17  
 \*BIBLIOGRAPHIES, \*SCIENCE TEACHERS, \*STUDENT CHARACTERISTICS,  
 \*TEACHER CHARACTERISTICS, ADVANCED PROGRAMS, BIOLOGY, CHEMISTRY,  
 COLLEGE SCIENCE, DOCTORAL THESES, ELEMENTARY SCHOOL SCIENCE,  
 EDUCATIONALLY DISADVANTAGED, INTERACTION PROCESS ANALYSIS, PHYSICS,  
 PHYSICAL SCIENCES, SLOW LEARNERS, SECONDARY SCHOOL SCIENCE, TEACHER  
 EVALUATION, TEACHER ATTITUDES, STUDENT ATTITUDES
27. SE 005 184 3 13 01 17  
 WAGNER, BARTLETT ADAM  
 THE RESPONSES OF ECONOMICALLY ADVANTAGED AND ECONOMICALLY  
 DISADVANTAGED SIXTH GRADE PUPILS TO SCIENCE DEMONSTRATIONS  
 UNIVERSITY OF CONNECTICUT, STORRS  
 UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN  
 ED 026 252 NOT AVAILABLE FROM EDRS  
 67 206  
 \*ACADEMIC ACHIEVEMENT, \*ELEMENTARY SCHOOL SCIENCE, \*INSTRUCTION,  
 \*STUDENT CHARACTERISTICS, \*SOCIOECONOMIC BACKGROUND, ACHIEVEMENT,  
 CULTURALLY DISADVANTAGED, DOCTORAL THESES, ECONOMICALLY  
 DISADVANTAGED, LABORATORY EXPERIMENTS

## C. AUTHOR INDEX

Authors or organizations responsible for documents are listed alphabetically. The document number of each publication listed is entered after the name of the author or organization. The letter indicates the section of the bibliography and the numeral represents the document number in that section.

BINGMAN, RICHARD MARVIN (B2, B3)

BOZARTH, JAMES OLIVER (B4)

BRODIE, DONALD Q.;  
SUCHMAN, EDWARD A. (B5)

BROWN, TERRANCE RALPH (B6)

CARTER, JACK CALDWELL (A2)

CARUTHERS, BERTRAM, SR. (A3)

DELANEY, CREIGHTON HALL (B7)

GOHN, LYLE ALAN (B8)

GREEN, FREDERICK ELMAN (B9)

HANDLEY, HERBERT M.;  
BLEDSOE, JOSEPH C. (A4)

HEDLEY, CAROLYN NEAL (A5)

HEDLEY, ROBERT LLOYD (B10)

HELDMAN, LAWRENCE;  
AND OTHERS (A6)

HINES, SALLYLEE HUGHES (A7)

JOHNSTEN, THOMAS D. (B11)

JORGENSEN, HAROLD CHRISTEN (A8)

KIMBALL, MERRITT E. (A9)

LANE, RODNEY A. (A10)

MACHLUP, STEFAN (A11)

MALLINSON, GEORGE G. (B12)

MYERS, BYRON EVANS (B13)

NEUFELD, K. ALLEN (B14)

O'HARA, SISTER VIRGINIA MARY (B15)

PARAKH, JAL S. (A12, A13, B16, B17)

PERKES, VICTOR ASTON (A14)

RAUN, CHESTER E. (B18)

RAVEN, RONALD J. (B19)

ROSENBLOOM, PAUL C.;  
AND OTHERS (A15)

SADLER, PAUL M. (A16)

SARGENT, EARL ALVIN (A17)

SAUNDERS, WALTER LANE (B20)

SCHMEDEMANN, GARY;  
LA SHIER, WILLIAM S. (A18)

SHEDD, AARON NEAL (B21)

SHUGART, C. G. (A19)

STENDLER, CELIA BURNS (B22)

THOMAS, PATRICIA GRAFTON;  
BUELL, ROBERT R. (B23)

TWEETEN, PAUL W.;  
YAGER, ROBERT E. (A20)

VAN ERDEWYK, ZENO MARTIN (B24)

VITROGEN, DAVID (B25)

WAGNER, BARTLETT ADAM (B27)

WALBERG, HERBERT J.;  
WELCH, WAYNE W. (A21)

WOODARD, A. L. (A22)

(14)

## D. UNAUTHORED ARTICLES

EDITORIAL COMMENT (B1)

SCIENCE EDUCATION INFORMATION REPORT, GENERAL BIBLIOGRAPHY SERIES 10, TEACHER CHARACTERISTICS, STUDENT CHARACTERISTICS (A1, B26)